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## THE CLINICAL RELATIONS OF GRAVITY, POSTURE AND CIRCULATION.

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THE vascular mechanism is everywhere in a state of "tone" by which its capacity is actively reduced. Were the physiological tone to be released the capacity of the blood channels in the splanchnic area alone would be sufficient to contain all the blood and the circulation would come to an end in the erect posture because no fluid could reach the heart.

This tonicity of the vascular bed is what keeps the blood from stagnating in the capacious reservoirs of the abdomen under the influence of gravitation. It is essentially a vital phenomenon. There is a distinction between the regulating mechanisms for the preservation of tone in the arteries as contrasted with the veins of the splanchnic system, but an essential adjunct to the proper function of the veins is the mechanical support afforded by the normal tension of the abdominal wall.

Physiologists have supplied us with fundamental data for the apprehension of the hydrostatic disorders of the circulation.

pressure can be regulated to a nicety without interference with respiratory movement. The fixture—belt, band, or corset—should be adapted to the individual who wears it, and should be regarded as a makeshift during the endeavor to reestablish correct physiological relations.

**SUMMARY AND CONCLUSIONS.** This contribution is a plea for the view that splanchnic stasis is not a pathological curiosity, but that it is potentially present, and may be the starting-point for vicious circles of derangement in every case of general functional weakness.

It has been shown that in the erect posture the blood would largely gravitate into the splanchnic veins were it not for the reaction of physiological mechanisms of which the splanchnic vaso-motor apparatus and the muscles of the abdominal wall are the chief factors. Laxness of the abdominal wall, probably leads, in the erect posture, to the establishment of a negative pressure within the abdomen, which it is a prime object of treatment to correct.

It is pointed out that depletion of the intracranial blood current must follow insufficient compensation of the hydrostatic pressure involved in the erect posture. Virtual anemia of the brain leading to a multiplicity of disorders, not the least of which is probably vasomotor overstrain, is the natural sequence. It is probable that excess of blood-pressure in the recumbent as compared with the erect posture is a trustworthy index of splanchnic stasis.

No attempt has been made here to exploit the possible influence of splanchnic stasis on the oxygenating power of the lungs or their resistance toward infection or on the metabolism of the abdominal viscera and intoxications arising therefrom.

#### THE FASTING TREATMENT OF DIABETES MELLITUS, WITH SPECIAL REFERENCE TO ACIDOSIS.<sup>1</sup>

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SINCE its inception by Rollo the dietetic treatment of diabetes mellitus has had as its object the attainment of the alycosuric state. To attain this state, carbohydrate was withdrawn from the diet; this was done, but never quite satisfactorily, because with-

<sup>1</sup> Read before the New York Academy of Medicine, December 21, 1915.